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**ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY CLASS I PERMIT**

COMPANY NAME: Tucson Electric Power Company
FACILITY NAME: Springerville Generating Station
PERMIT NUMBER: 1000105
ORIS CODE: 8223
DATE ISSUED: Proposed Permit
EXPIRY DATE:

SUMMARY

This operating permit is issued to Tucson Electric Power Company (TEP), the Permittee, for operation of their Springerville Generating Station (SGS), located in Apache County, approximately 15 miles North of Springerville, Arizona. The area is a designated attainment area for all criteria pollutants. The Springerville Generating Station is classified as a Class I, Major Source.

An *Approval to Construct* for two coal-fired steam electric generating units was issued by EPA on December 21, 1977 to the facility. These two pulverized coal-fired, steam generating units are rated to produce a combined output of approximately 760 net megawatts. Each unit typically operates 24 hours per day, seven days per week, and 365 days per year. Both units normally burn coal. The plant has a capacity to process 5,272,000 tons of coal per year. The Springerville Generating Station is also permitted to burn dual fuel (co-firing of fuel oil and coal for units 1 & 2, and co-firing of used oil and coal for unit 1). Baghouses are utilized to capture particulate matter emissions. Spray Dry Absorbers are used to control SO₂. Low NO_x burners, overfire air ports and good operating practices control NO_x emissions.

All definitions, terms, and conditions used in this permit conform to those in the Arizona Administrative Code R18-2-101 et. seq. (A.A.C.) and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the A.A.C. All material permit conditions have been identified within the permit by a double underline. All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA), except for those terms and conditions that are specifically designated as "State Requirements."

SGS is a "major source". The potential emission rates of the following pollutants are greater than 100 tons per year: (1) Particulate Matter, (2) Sulfur Dioxide, (3) Nitrogen Oxides, (4) Carbon Monoxides, and (5) Volatile Organic Compounds. SGS is subject to the Acid Rain Program of the Clean Air Act. This permit is issued in accordance with Title V of the Clean Air Act, and Title 49, Chapter 3 of the Arizona Revised Statutes. Applicable requirements for the operations at the Springerville Generating Station are listed in Attachment "C" of this permit.

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TABLE 1: Summary of Permit Requirements

This table summarizes certain requirements that are applicable to Springerville Generating Station operations. It is intended for reference use only. The enforceable terms and conditions of this permit are contained in Attachments A through F of this permit.

Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting ⁽¹⁾	Testing Frequency/ Methods
<u>POINT SOURCES</u> P1: <i>Unit 1</i> P2: <i>Unit 2</i> Maximum Capacity: 380 net MW each Primary Fuel: Coal Alternative: - Combination = mixture of coal and fuel oil for both units - Combination = mixture of coal and used oil for Unit 1 A.A.C. R18-2-903, 40 CFR 60 Subpart D, EPA Approval to Construct/Modify of December 21, 1977	PM	Baghouses	≤ 0.034 lb/million Btu	Evaluate opacity from the COMS on a 24-hr rolling average excluding periods of startup, shutdown, and malfunction. If this opacity reading exceeds 12% corrective actions shall be taken within 24 hours to improve control equipment performance and reduce opacity to at least 12%. See Section III.D.2 of Attachment "B".	Maintain records of corrective actions taken	-Annual performance test / EPA Reference Method 5
	Visible Emissions	Baghouses	$\leq 15\%$ opacity	-COMS -Date, time and type of fuel change	Part 60 and/or Part 75 requirements. Type, date, and time of fuel change	-Annual performance test / EPA Reference Method 9
	SO ₂	Sulfur dioxide scrubber system	≤ 0.690 lb/million Btu	-CEMS, See Section III.D.1 of Attachment "B".	Part 60 and/or Part 75 requirements.	-Annual performance test / EPA Reference Method 6 or 6C
	NO _x	Low NOx burners and overfire air ports	≤ 0.697 lb/million Btu	-CEMS, See Section III.D.1 of Attachment "B".	Part 60 and/or Part 75 requirements.	-Annual performance test / EPA Reference Method 7 or 7E

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P3: Auxiliary Boiler Fuel: No. 2 Fuel Oil [AAC R18-2-702 and 724]	PM	No controls installed	$E = 1.02 Q^{0.769}$	Maintain copy of contractual agreement for fuel indicating the fuel firing rate, lower heating value, the ash content of the fuel	--	--
	SO ₂	No controls installed	≤ 1.0 lb/million Btu -sulfur content <0.9% by weight	-Maintain copy of fuel supplier certification including name of supplier, sulfur content, and method used to determine sulfur content -Record of any change in fuel type	--	--
	NOx	No controls installed	**	--	--	--
	Visible Emissions	No controls installed	≤ 15% opacity	--	All six-minute periods in which opacity >15%	-Method 9 observation if boiler runs continuously for >48 hours -If runs continuously for 168 hours, one Method 9 observation every 168 hours
Unit 1 - On-specification used oil [A.R.S. 49-426.G]	Arsenic, Cadmium, Chromium, Lead	No controls installed	-Arsenic ≤ 5 ppm -Cadmium ≤ 2 ppm -Chromium ≤ 10 ppm -Lead ≤ 100 ppm -PCBs ≤ 2 ppm -Maximum of 2,500 gals/hr and 100,000 gals/yr	- Record of amount, hours and dates of fuel burned	- Report measures taken in section VI.B of Attachment B	-Test representative sample prior to burning used oil using EPA Approved Method -Test representative sample annually for Arsenic, Cadmium, Chromium, and Lead

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Ambient Air Monitoring [EPA Approval to Construct /Modify of December 21, 1977 and A.A.C.R18-2-306.A.2]	--	--	--	- See Section V.A, B, C, and D of Attachment B	- Report measures taken under Section V.E of Attachment B.	--
<u>FUGITIVE SOURCES</u> <u>F1. Coal Preparation</u> Storage Bin, unloading system, sampling system, crusher, conveyor transfer points and unloading transfer tower [40 CFR 60 Subpart Y and EPA Approval to Construct /Modify of December 21, 1977]	Visible Emissions	- Enclosures w/dust collectors & water spray at transfer points - Covered conveyor belt transfer system	≤ 20%	-Weekly visual emissions observation See section III.F of Attachment B for further detail.	- Report measures taken under Section III.F of Attachment B.	- EPA Reference Method 9 when opacity
<u>F2. Lime Preparation</u> Storage silos, lime unloading and lime feed bins [A.A.C. R18-2-720, 702]	Particulate Matter	Enclosures and baghouses	$E = 55.0 P^{0.11} - 40$	--	--	--

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Emissions Unit	Pollutants Emitted	Control Measure	Emission Limits/Standards	Monitoring/Recordkeeping	Reporting ⁽¹⁾	Testing Frequency/ Methods
	Visible Emissions	--	≤ 40%	-Weekly visual emissions observation See section III.G of Attachment B for further detail.	--	- EPA Method 9
F3. Fly Ash Handling [AAC R18-2-730, 702, 610]	Particulate Matter	See Section II.D of Attachment B	E = 55.0 P ^{0.11} - 40	--	--	--
	Visible Emissions	--	≤ 40%	-Weekly visual emissions observation See section III.H of Attachment B	--	- EPA Method 9
F4. Cooling Towers [A.A.C. R18-2-730, 702]	Particulate Matter	--	E = 55.0 P ^{0.11} - 40	--	--	--
	Visible Emissions	--	≤ 40%			
F5. Non-Point sources <i>a. Driveways, parking areas, vacant lots</i> [A.A.C. R18-2-604.A]	visible Emissions	Gravel	≤ 40%	-Maintain gravel -Dates additional gravel added	--	--
<i>b. Unused open areas</i> [A.A.C. R18-2-604.A]	Visible Emissions	Native vegetation	≤ 40%	Dates fresh vegetation added	--	--

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<i>c. Open areas (Used, altered, re- paired, etc.)</i> [A.A.C. R18-2-604.A]	Visible Emissions	Dust suppressants or wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
<i>d. Construction of road- ways</i> [A.A.C. R18-2-605.A]	Visible Emissions	Dust suppressants or wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
F5. Non-Point sources (con't) <i>e. Material transportation</i> [A.A.C. R18-2-605.B]	Visible Emissions	Covering, dust suppressants, or wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
<i>f. Material handling</i> [A.A.C. R18-2-606]	Visible Emissions	Dust suppressants, wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
<i>g. Storage piles</i> [A.A.C. R18-2-607.A]	Visible Emissions	Covering, dust suppressants, wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
<i>h. Stacking and reclaiming machinery at storage piles</i> [A.A.C. R18-2-607.B]	Visible Emissions	Minimum fall, dust suppressants, wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--
<i>i. Roadway and site cleaning</i> [A.A.C. R18-2-804.B]	Opacity	Dust suppressants, wetting agents	≤ 40%	-Date and type of activity performed -Type of control used	--	--

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F6. Abrasive Blasting [A.A.C. R18-2-702.B, 726]	Opacity	Wet blasting or effective enclosures with necessary dust collecting equipment	≤ 40%	-Date and type of project -Control measures used	--	--
F7. Spray Painting [A.A.C. R18-2-702.B, 727, SIP R9-3-527.C]	VOC	Enclosures	≥96% capture, except for arch. coating or spot painting dispose < 1.5 gallons	Date, duration of project. Control measures used, MSDS of paints used	--	--
	Opacity	Not required	≤ 40%	Date, duration of project, Control measures used	--	--
F8. Mobile Sources						
<i>a. Off road machinery</i> [A.A.C. R18-2-802]	Opacity	Not required	≤40% for any period greater than 10 consecutive seconds	Records of emissions related maintenance activities performed on Permittee's off-road machinery stationed at the facility	--	--
<i>b. Roadway and site cleaning machinery</i> [A.A.C. R18-2-804.A]	Opacity	Not required	≤40% for any period greater than 10 consecutive seconds	Records of emissions related maintenance activities performed on Permittee's roadway and site cleaning machinery stationed at the facility	--	--
F9 Nonvehicle Air Conditioner Maintenance and/or Services [40 CFR 82, Subpart F]	Ozone depleting substances	As required by rule	As required by rule	Relevant paperwork on file	--	--

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F10. Vapor Extractor Blower Vent, Generator Seal Oil Vapor Extractor and Hydraulic Fluid Reservoir Vapor Extractor [A.A.C. R18-2-730.F]	VOC	Installations to prevent VOCs from evaporating, leaking, escaping or otherwise discharged into ambient air	**	--	--	--
F11. Solvent Cleaning, Dipping Operation [A.A.C. R18-2-730.F]	VOC	Install means to reduce air pollution from evaporation, leakage, or discharge of solvents being processed, stored, used, or transported.	**	--	--	--
F11. Demolition/Renovation [A.A.C. R18-2-1101.A.8]	Asbestos	As required by rule	As required by rule	-Relevant paperwork on file -Discharge no visible emissions during collection, processing packaging, or transporting; cover landfill	--	--

-- **Not required**

** **No Limits established**

⁽¹⁾ **Semiannual Compliance Certifications required for all permitted equipment**

ATTACHMENT "A": GENERAL PROVISIONS

Air Quality Control Permit No. 1000105
for

TUCSON ELECTRIC POWER COMPANY - Springerville Generating Station

I. PERMIT EXPIRATION AND RENEWAL [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2, and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The Permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

II. COMPLIANCE WITH PERMIT CONDITIONS [A.A.C. R18-2-306.A.8, A.R.S. § 49-463, and A.R.S. §49-464]

- A. The Permittee shall comply with all the conditions contained in Attachments “A” through “F” of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity not a defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE [A.A.C. R18-2-306.A.8.c and 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
 - 1. Additional applicable requirements under the Act become applicable to the Class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the

requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.

2. Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.
 3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in paragraph III.B.1 of this Attachment shall not result in a resetting of the five year permit term.

IV. POSTING OF PERMIT

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance where the facility is located in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
1. Current permit number.
 2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

V. FEE PAYMENT

[A.A.C. R18-2-326 and 306.A.9.]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

VII. COMPLIANCE CERTIFICATION

- A. Permittee shall submit a compliance certification to the Director twice each year, which describes the compliance status of the source with respect to each permit condition. The first certification shall be submitted no later than April 30th, and shall report the compliance status of the source during the period between October 1st of the previous year, and March 31st of the current year. The second certification shall be submitted no later than October 31st, and shall report the compliance status of the source during the period between April 1st and September 30th of the current year. The initial compliance certification shall reflect compliance status of the source beginning the date of permit issuance. [A.A.C. R18-2-309.2.a]

The compliance certifications shall include the following:

- 1. Identification of each term or condition of the permit that is the basis of the certification; [A.A.C. R18-2-309.2.c.i]
- 2. Compliance status with each applicable requirement; [A.A.C. R18-2-309.2.c.ii]
- 3. Whether compliance was continuous or intermittent; [A.A.C. R18-2-309.2.c.iii]
- 4. Method(s) used for determining the compliance status of the source, currently and over the reporting period; [A.A.C. R18-2-309.2.c.iv]
- 5. A progress report on all outstanding compliance schedules submitted pursuant to Section XII.D of this Attachment. Progress reports submitted with compliance certifications satisfy the reporting requirements of A.A.C. R18-2-309.5.d. [A.A.C. R18-2-309.5.d]

- B. A copy of all compliance certifications for Class I permits shall also be submitted to the EPA Administrator. [A.A.C. R18-2-309.2.d]

VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS [A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification

required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

IX. INSPECTION AND ENTRY

[A.A.C. R18-2-309.4]

The Permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the Permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the Permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard. [A.A.C. R18-2-310.4]

XI. ACCIDENTAL RELEASE PROGRAM

If this source becomes subject to the provisions of 40 CFR Part 68, then the Permittee shall comply with these provisions according to the timeline specified in 40 CFR Part 68. [40 CFR 68]

XII. REPORTING OF EXCESS EMISSIONS, PERMIT DEVIATIONS, AND EMERGENCIES

A. EXCESS EMISSIONS REPORTING

[A.A.C. R18-2-310.C]

1. Excess emissions, as defined in A.A.C. R18-2-101.37, shall be reported as follows:

- a. The Permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
 - (1) Notification by telephone or facsimile within 24 hours of the time when the Permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
 - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
 - b. Report shall contain the following information:
 - (1) Identity of each stack or other emission point where the excess emissions occurred.
 - (2) Magnitude of the excess emissions expressed in the units of the applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.
 - (3) Date, time and duration or expected duration of the excess emissions.
 - (4) Identity of the equipment from which the excess emissions emanated.
 - (5) Nature and cause of such emissions.
 - (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
 - (7) Steps taken to limit the excess emissions. If the excess emissions resulted from start-up or malfunction of Steam Unit 1 or 2, the report shall contain a list of the steps taken to comply with the permit procedures.
2. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.1.a.(2) of this Section.
- [A.A.C. R18-2-310.D]
3. It shall be the burden of the Permittee to demonstrate, through submission of the data and

information required by Section XII.A.1 of Attachment “A”, that all reasonable and practicable measures within the Permittee's control were implemented to prevent the occurrence of excess emissions. [A.A.C. R18-2-310.B]

B. PERMIT DEVIATIONS REPORTING

[A.A.C. R18-2-306.A.5]

1. A deviation means any situation in which an emissions unit fails to meet a permit term or condition. A deviation is not always a violation. A deviation can be determined through observation or through review of data obtained from any testing, monitoring, or recordkeeping established in this permit. For a situation lasting more than 24 hours which constitutes a violation, each 24 hour period is considered a separate deviation. Included in the meaning are any of the following:
 - a. A situation where emissions exceeded an emission limitation or standard;
 - b. A situation where process or control device parameter values indicate that an emission limitation or standard has not been met;
 - c. A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit.
2. Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.
3. All instances of deviations from permit requirements shall be clearly identified in the required semiannual monitoring report specified in Attachment “B”, Section III.B, and shall be certified by the responsible official. [A.A.C. R18-2-306.A.5.a]

C. EMERGENCY PROVISION REPORTING

[A.A.C. R18-2-306.E]

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
 - a. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions

of paragraph (b) of this subsection are met.

- b. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) The permittee submitted notice of the emergency to the Director by certified mail, facsimile, or hand delivery within two working days of the time when emission limitations were exceeded due to the emergency. This notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective action taken.
- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- d. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

- D. For any excess emission or permit deviation that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

[A.R.S. 49-426.I.5]

XIII. RECORD KEEPING REQUIREMENTS

[A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
 - 1. The date, place as defined in the permit, and time of sampling or measurements;
 - 2. The date(s) analyses were performed;

3. The name of the company or entity that performed the analyses;
 4. A description of the analytical techniques or methods used;
 5. The results of such analyses; and
 6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings or other data recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

XIV. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

Permittee shall submit the following reports :

- A. Compliance certifications in accordance with Section VII of Attachment “A”.
- B. Reports of excess emissions, permit deviations, and emergencies in accordance with Section XII of Attachment “A”.
- C. Other reports required by Section III of Attachment “B”.

XV. DUTY TO PROVIDE INFORMATION

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The Permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the Permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the Permittee has failed to submit any relevant facts or if the Permittee has submitted incorrect information in the permit application, the Permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

XVI. PERMIT AMENDMENT OR REVISION

[A.A.C. R18-2-318, 319 and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVII, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);

- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

The applicability and requirements for such action are defined in the above referenced regulations.

XVII. FACILITY CHANGE WITHOUT PERMIT REVISION

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
 - 1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
 - 2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
 - 3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
 - 4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
 - 5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section, a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible. Each notification shall include:
 - 1. When the proposed change will occur.
 - 2. A description of each such change.

3. Any change in emissions of regulated air pollutants.
4. The pollutants emitted subject to the emissions trade, if any.
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the provisions in the implementation plan authorizing the trade.
6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
7. Any permit term or condition that is no longer applicable as a result of the change.

XVIII. TESTING REQUIREMENTS

[A.A.C.R18-2-312]

A. Operational Conditions During Testing

Tests shall be conducted during operation at the full load of each unit under representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during start-up, shutdown, and malfunction (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

B. Performance tests shall be conducted and data reduced in accordance with the test method and procedures contained in the Arizona Testing Manual unless modified by the Director pursuant to A.A.C. R18-2-312.B.

C. Test Plan

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

D. Stack Sampling Facilities

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

E. Interpretation of Final Results

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the Permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs. If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the Permittee's control. Termination of any test without good cause after the first run is commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

F. Report of Final Test Results

A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.A.

XIX. PROPERTY RIGHTS

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

XX. SEVERABILITY CLAUSE

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force.

XXI. PERMIT SHIELD

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XVI.B of this Attachment and Section XVII of this Attachment.

XXII. ACID RAIN

- A. When provisions or requirements of the regulations incorporated pursuant to A.A.C. R18-2-333.A (Acid Rain) conflict with any of the applicable requirements, the regulations incorporated by A.A.C. R18-2-333.A (Acid Rain) shall apply and take precedence.
[A.A.C. R18-2-333]
- B. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement.
[A.A.C. R18-2-306.A.6.a]
- C. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
[A.A.C. R18-2-306.A.6.b]
- D. Any such allowance shall be accounted for according to the procedures established in regulations promulgated under Title IV of the Act.
[A.A.C. R18-2-306.A.6.c]
- E. All of the following are prohibited:
1. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners or the operators of the unit or the designated representative of the owners or the operators as of the applicable allowance transfer deadline;
 2. Exceedances of applicable emission rates;
 3. The use of any allowance prior to the year for which it was allocated; and
 4. Contravention of any other provision of the permit.
- [A.A.C. R18-2-306.A.6.d]

ATTACHMENT "B": SPECIFIC CONDITIONS

Air Quality Control Permit No. 1000105

For

TUCSON ELECTRIC POWER COMPANY - Springerville Generating Station

I. EMISSION LIMITS/ STANDARDS

A. Unit 1 and Unit 2

1. Opacity Standard

The Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which exhibit greater than 15 percent opacity except for periods of startup, shutdown, and malfunction as defined below.

[Approval to Construct of December 21, 1977, Condition XIII,
40 CFR §60.11.(c) and A.A.C. R18-2-331]

a. Startup

Startup commences with the first preparations to combust fuel in the boiler, except for hot startup, which includes all time and fuel combustion required to maintain the unit at hot standby. Startup activities include, but are not limited to, all operations and maintenance activities, fuel changes, temperature related holding periods and delays related to equipment or system requirements. Startup is completed when all of the following conditions are met: 1) the flue gas system temperatures have reached a sustained level of 290 °F at the inlet of the Spray Dryer Absorbers (SDAs) for placement of the SDAs in continuous operation and a sustained level of 190 °F at the inlet of the baghouse for placement of the baghouse in continuous operation. The operator may place either the SDA or the baghouse in operation before reaching the temperatures described above if he or she determines that it may be safe to do so. 2) the plant restrictive temperatures and air-flow requirements have been met and 3) the unit is capable of further load increases. Startup may be a single smooth sequence of events, or, alternatively may require several attempts, and is not necessarily of predictable duration. The startup operation may require placing the SDA or the baghouse in and out of service, as may be required if temperatures drop below safe levels, until all conditions of the startup operation are met and the operator determines that the unit is no longer in startup mode.

b. Shut Down

Shutdown commences when the unit load is to be lowered below the typical minimum load for the purposes of removing the unit from the system. Shutdown includes all activities necessary to safely remove the unit from service, including, but not limited to, all operations and maintenance activities, fuel changes, delays related to equipment and system requirements and load change delays. Shutdown is completed when all activities are completed to safely place the unit in cold or hot standby conditions.

c. Malfunction

Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment or a process to operate in a normal and usual manner, but does not include failures that are caused by poor maintenance, careless operation or any other upset condition or equipment breakdown which could have been prevented by the exercise of reasonable care.

2. Particulate Matter Standard

The Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain particulate matter in excess of 0.034 lb per million Btu derived from fossil fuel except for periods of startup, shutdown, and malfunction as defined in Section I.A.1.a, b, and c above.

[Approval to Construct of December 21, 1977, Condition XIII, 40 CFR §60.8 (c)]

3. Sulfur Dioxide Standard

a. The Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain sulfur dioxide in excess of 0.690 pounds per million Btu derived from fossil fuel except for periods of startup, shutdown, and malfunction as defined in Section I.A.1.a, b, and c above..

[Approval to Construct of December 21, 1977, Condition XIII
and 40 CFR §60.8.(c)]

b. Compliance shall be based on the total heat input from all fossil fuels burned.

[40 CFR 60.43(c)]

4. Nitrogen Oxide Standard

The Permittee shall not cause to be discharged into the atmosphere from the stack of each unit any gases which contain nitrogen oxides, expressed as NO₂ in excess of 0.697 pounds per million Btu derived from fossil fuel except for periods of startup, shutdown, and

malfunction as defined in Section I.A.1.a, b, and c above..

[Approval to Construct of December 21, 1977, Condition XIII
and 40 CFR §60.8.(c)]

5. Unless otherwise specified, the emission limits defined in above I.A.2, I.A.3, and I.A.4 shall be measured by manual testing on a one-hour average (the average of three one-hour tests).

6. Fuel Limitation [A.A.C. R18-2-306.A.2]

The Permittee shall burn only the following as fuel in the units:

- a. Coal;
 - b. Co-firing of coal and fuel oil; and
 - c. Co-firing of coal and used oil subject to Section VI of this Attachment in Unit 1 boiler only.
7. Vapor Extractor Blower Vents, Generator Seal Oil Vapor Extractor and Hydraulic Fluid Reservoir Vapor Extractors

The Permittee shall process, store, use, and transport materials including solvents or volatile compounds in such a manner and by such means that they will not evaporate, leak, escape, or be otherwise discharged into the atmosphere so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, the installation and usage of such control methods, devices, or equipment shall be mandatory. [A.A.C. R18-2-730.F]

B. Auxiliary Boiler

1. Opacity Standard [A.A.C. R18-2-724.J]

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from the auxiliary boiler, smoke which exceeds 15 percent opacity.

2. Particulate Matter Standard

The Permittee shall not cause, allow or permit the emission of particulate matter, caused by the combustion of fuel, from the auxiliary boiler in excess of the amount calculated by the following equation: [A.A.C. R18-2-724.C.1]

$$E = 1.02 Q^{0.769}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

3. Sulfur Dioxide Standard

The Permittee shall not cause, allow, or permit the emission of more than 1.0 pounds of sulfur dioxide per million Btu heat input. [A.A.C. R18-2-724.E]

4. Definition of Heat Input

a. For the purposes of conditions I.B.2 and I.B.3.a of this Attachment, "heat input" is defined as the aggregate heat content of all fuels whose products of combustion pass through a stack or other outlet. The heat content of solid fuel shall be determined in accordance with A.A.C. R18-2-311. Compliance tests shall be conducted during operation at the nominal rated capacity of each unit. [A.A.C. R18-2-724.B]

b. The total heat input from the burning of all fuels shall be computed as follows:

$$TotalHeatInput = \sum_{j=1}^n \sum_{i=1}^k (NHV_{i,j}) x (U_{i,j})$$

Where:

NHV_i = Net heating value of each fuel "i" at standard temperature and pressure fired in each unit "j"; and

U_i = Firing rate of each fuel "i" in each unit "j".

5. Fuel Limitation

a. The Permittee shall burn only No. 2 diesel fuel in the auxiliary boiler.

[A.A.C. R18-2-306.A.2]

b. The Permittee shall not use high sulfur oil (fuel sulfur content ≥ 0.9% by weight) as a fuel unless the Permittee demonstrates to the satisfaction of the Director both that sufficient quantities of low sulfur oil are not available for use by the source and that it has adequate facilities and contingency plans to insure that the sulfur dioxide ambient air quality standards set forth in A.A.C. R18-2-202 will not be

violated.

[A.A.C. R18-2-724.G]

C. Coal Preparation

On and after the date on which the performance test required to be conducted under Section IV.C of this Attachment is completed, the Permittee shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

[40 CFR 60.252(c), A.A.C. R18-2-331]

D. Lime Handling

1. Opacity

The Permittee shall not cause, allow or permit to be emitted any emissions into the atmosphere from any lime handling operation in excess of 40 percent opacity measured in accordance with EPA Reference Method 9.

[A.A.C. R18-2-610 and 702.B.1]

2. Particulate Matter

[A.A.C. R18-2-730.A.1 and B]

The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any lime handling operation in total quantities in excess of the amounts calculated by the following equations:

- a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10 P^{0.67}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

- b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

E. Fly Ash Handling

1. Opacity

The Permittee shall not cause, allow or permit to be emitted any emissions into the atmosphere from the fly ash handling operation in excess of 40 percent opacity measured in accordance with EPA Reference Method 9.

[A.A.C. R18-2-610 and 702.B.1]

2. Particulate Matter

[A.A.C. R18-2-730.A.1 and B]

The Permittee shall not cause, allow or permit the discharge of particulate matter into the atmosphere in any one hour from any fly ash handling operation in total quantities in excess of the amounts calculated by the following equations:

- a. For process sources having a process weight rate of 60,000 pounds per hour (30 tons per hour) or less, the maximum allowable emissions shall be determined by the following equation:

$$E = 4.10 P^{0.67}$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

- b. For process sources having a process weight rate greater than 60,000 pounds per hour (30 tons per hour), the maximum allowable emissions shall be determined by the following equation:

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

F. Cooling Towers 1 and 2

1. Opacity

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any unclassified source emissions in excess of 40% opacity measured in accordance with EPA Reference Method 9. [A.A.C. R18-2-702.B.1]

2. Particulate Matter

The Permittee shall not discharge particulate matter into the atmosphere in any one hour from any cooling tower in total quantities in excess of the amounts calculated by the following equation: [A.A.C. R18-2-730.A.1]

$$E = 55.0 P^{0.11} - 40$$

Where:

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

P = the process weight rate in tons-mass per hour. The total process weight from all similar units employing a similar type process shall be used in determining the maximum allowable emission of particulate matter.

3. The Permittee shall not emit gaseous or odorous materials from equipment, operations or premises in such quantities or concentrations as to cause air pollution.

[A.A.C. R18-2-730.D]

4. Where a stack, vent, or other outlet is at such a level that fumes, gas mist, odor, smoke, vapor or any combination thereof constituting air pollution is discharged to adjoining property, the Director may require the installation of abatement equipment or the alteration of such stack, vent, or other outlet by the Permittee thereof to a degree that will adequately dilute, reduce, or eliminate the discharge of air pollution to adjoining property.

[A.A.C. R18-2-730.G]

G. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling
 - a. The Permittee shall not cause, allow or permit visible emissions from open areas, roadways and streets, storage piles or material handling in excess of 40 % opacity measured in accordance with the Arizona Testing Manual, Reference Method 9.
[A.A.C. R18-2-610]
 - b. Permittee shall employ one or more of the following reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne:
 - (1) Use approved dust suppressants, adhesive soil stabilizer, paving, covering, detouring, or wetting agents on, or bar access to open areas during construction operations, repair operations, demolition activities, clearing operations, and leveling operations, or when any earth is moved or excavated;
[A.A.C. R18-2-604.A]
 - (2) Use approved dust suppressants, adhesive soil stabilizer, or paving on, or bar access to driveways, parking areas, and vacant lots where motor vehicular activity occurs;
[A.A.C. R18-2-604.B]
 - (3) Use approved dust suppressants, temporary paving, detouring or wetting agents when a roadway is repaired, constructed, or reconstructed;
[A.A.C. R18-2-605.A]
 - (4) Use dust suppressants, spray bars, hoods, wetting agents, or cover the load adequately when transporting material likely to give rise to airborne dust;
[A.A.C. R18-2-605.B and 606]
 - (5) Use spray bars, hoods, wetting agents, dust suppressants, or cover when crushing, handling, or conveying material that is likely to give rise to airborne dust;
[A.A.C. R18-2-606]
 - (6) Adequately cover, or use wetting agents, chemical stabilization, or dust suppressants when stacking, piling, or otherwise storing organic or inorganic dust producing material;
[A.A.C. R18-2-607.A]
 - (7) Operate stacking and reclaiming machinery utilized at storage piles at all times with a minimum fall of material and with the use of spray bars and wetting agents;
[A.A.C. R18-2-607.B]
 - (8) Use wetting agents or dust suppressants before the cleaning of site,

roadway, or alley. Earth or other material shall be removed from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water or by other means; or [A.A.C. R18-2-804.B]

- (9) Any other method as proposed by the Permittee and approved by the Director.

2. Open Burning [A.A.C. R18-2-602]

Except as provided in A.A.C. R18-2-602.C(1), C(3), and C(4), and except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits, the Permittee shall not conduct open burning.

H. Other Periodic Activities

1. Abrasive Blasting [A.A.C. R18-2-726]

- a. The Permittee shall not cause or allow sandblasting or other abrasive blasting without minimizing dust emissions to the atmosphere through the use of good modern practices. Good modern practices include:

- (1) wet blasting;
- (2) effective enclosures with necessary dust collecting equipment; or
- (3) any other method proposed by the Permittee and as approved by the Director.

- b. The Permittee shall not cause, allow or permit visible emissions from sandblasting or other abrasive blasting operations in excess of 40 percent opacity measured in accordance with EPA Reference Method 9.

[A.A.C. R18-2-702.B]

2. Use of Paints

While performing spray painting operations the Permittee shall comply with the following requirements:

- a. The Permittee shall not conduct or cause to be conducted any spray painting operation without minimizing organic solvent emissions. Such operations other than architectural coating and spot painting, shall be conducted in an enclosed area equipped with controls containing no less than 96 percent of the over spray. [A.A.C. R18-2-727.A]

- b. The Permittee shall not either:
- (1) Employ, apply, evaporate or dry any architectural coating containing photochemically reactive solvents for industrial or commercial purposes; or
 - (2) Thin or dilute any architectural coating with a photochemically reactive solvent.
- [A.A.C. R18-2-727.B]
- c. For the purposes of part b. and e. of this condition, a photochemically reactive solvent shall be any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified in paragraphs (1) through (3) of this subsection, or which exceeds any of the following percentage composition limitations, referred to the total volume of solvent:
- (1) A combination of the following types of compounds having an olefinic or cycle-olefinic type of unsaturation - hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones: five percent
 - (2) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: eight percent
 - (3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent
- [A.A.C. R18-2-727.C]
- d. Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the groups or organic compounds described in subsection c(1) through c(3) of this condition, it shall be considered to be a member of the group having the least allowable percent of the total volume of solvents.
- [A.A.C. R18-2-727.D]
- e. The Permittee shall not dispose by evaporation more than 1.5 gallons of photochemically reactive solvent in any one day.
- [SIP Provision R9-3-527.C]
- f. Visible emissions from spray painting operations shall not have an opacity of greater than 40 percent, measured in accordance with EPA Reference Method 9.
- [A.A.C. R18-2-702.B]

3. Mobile Sources

a. Classification

The requirements of this condition are applicable to mobile sources which either move while emitting air contaminants or are frequently moved during the course of their utilization but are not classified as motor vehicles, agricultural vehicles, or are agricultural equipment used in normal farm operations. Mobile sources shall not include portable sources as defined in A.A.C. R18-2-101.84.

[A.A.C. R18-2-801]

b. Off-road Machinery

The Permittee shall not cause, allow, or permit to be emitted into the atmosphere from any off-road machinery, smoke for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. Off-road machinery shall include trucks, graders, scrapers, rollers and other construction and mining machinery not normally driven on a completed public roadway.

[A.A.C. R18-2-802]

c. Roadway and Site Cleaning Machinery

The Permittee shall not cause, allow or permit to be emitted into the atmosphere from any roadway and site cleaning machinery smoke or dust for any period greater than ten consecutive seconds, the opacity of which exceeds 40 percent. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes.

[A.A.C. R18-2-804.A]

4. Demolition/Renovation

The Permittee shall comply with all applicable requirements of 40 CFR 61 Subpart M (National Emissions Standards for Hazardous Air Pollutants - Asbestos).

[A.A.C. R18-2-1101.A.8]

5. Nonvehicle Air Conditioner Maintenance and/or Services

The Permittee shall comply with all applicable requirements of 40 CFR 82 Subpart F (Protection of Stratospheric Ozone - Recycling and Emissions Reduction).

[40 CFR 82, Subpart F]

6. Solvent Cleaning / Degreasing, Dipping Operations

The Permittee shall process, store, use, and transport materials including solvents or volatile compounds in such a manner and by such means that they will not evaporate, leak, escape, or be otherwise discharged into the atmosphere so as to cause or contribute to air pollution. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage, or discharge, the installation and usage of such control methods, devices, or equipment shall be mandatory. [A.A.C. R18-2-730.F]

II. AIR POLLUTION CONTROL EQUIPMENT

[A.A.C. R18-2-331, 306.A.2]

A. Unit 1 and Unit 2

1. Particulate Matter [40 CFR 60.11(d) and A.A.C. R18-2-331]

At all times when the equipment is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate Joy baghouses in a manner consistent with good air pollution control practice for minimizing particulate matter emissions.

2. Sulfur Dioxide [40 CFR 60.11(d) and A.A.C. R18-2-331]

At all times when the system is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate the Niro dry flue gas desulfurization systems in a manner consistent with good air pollution control practice for minimizing sulfur dioxide emissions.

B. Coal Preparation

1. At all times when the system is in operation, including periods of startup, shutdown, and malfunction, the Permittee shall, to the extent practicable, maintain and operate baghouses used to capture particulate matter emissions associated with coal preparation and mixing in a manner consistent with good air pollution control practices.

[40 CFR 60.11(d) and A.A.C. R18-2-331]

2. Particulate matter shall be controlled with either water spray, enclosure with water spray, or enclosure with baghouses at the following locations, :

- a. Rail unloading area;
- b. Discharge hoppers;
- c. Discharge point from the conveyor carrying coal from the feeder;
- d. Active storage pile;
- e. Reserve storage pile;

- f. Discharge from the reclaim hoppers;
- g. Crusher structure; and
- h. Coal storage silos.

[Approval to Construct of December 21, 1977, Condition X.a and A.A.C. R18-2-331]

- 3. The Permittee shall operate and maintain at all times a covered conveyor belt transfer system. [A.A.C. R18-2-306.A.2 and 331]

C. Lime Handling

At all times when the system is in operation, the Permittee shall maintain and operate the enclosure system and baghouses used to capture particulate matter emissions associated with lime handling system in a manner consistent with good air pollution control practices.

[A.A.C. R18-2-331, and 306.A.2]

D. Fly Ash Handling

- 1. Fly ash shall be collected from the economizer and baghouses hoppers, and transported to the ash handling system.

[Approval to Construct of December 21, 1977, Condition X.c,
A.A.C. R18-2-331, and 306.A.2]

- 2. The emissions from the vent of the fly ash storage silos shall be ducted to the flue gas system before entering the baghouses.

[A.A.C. R18-2-331, and 306.A.2]

III. MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

- A. Within 180 days of issuance of this permit the owners or operators shall have on staff a person that is certified in EPA Reference Method 9 opacity observations. [A.A.C. R18-2-306.A.3]

- B. The Permittee shall log in ink or in an electronic format a record of any change in fuel type including:

- 1. Type of the fuel change;
- 2. Date of the fuel change; and
- 3. Time of the fuel change.

[A.A.C. R18-2-306.A.3.c]

- C. With the compliance certifications required by Section VII of Attachment "A", the Permittee shall submit a report of all monitoring activities required by Section III of this Attachment for the period as defined in Section VII of Attachment "A".

D. Unit 1 and Unit 2

1. Monitoring for Opacity, SO₂, NO_x, and CO₂
 - a. The Permittee shall calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide.

[40 CFR 60.45(a) and A.A.C. R18-2-331]
 - b. The continuous emission monitoring systems for SO₂, NO_x, and CO₂ shall meet the following requirements:
 - (1) 40 CFR Part 75, Appendix A, "Specification and Test Procedures"
 - (a) Installation and measurement location
 - (b) Equipment specifications
 - (c) Performance specifications
 - (d) Data acquisition and handling systems
 - (e) Calibration gas
 - (f) Certifications tests and procedures
 - (g) Calculations
 - (2) 40 CFR Part 75, Appendix B, "Quality Assurance and Quality Control Procedure"
 - (a) Quality control program
 - (b) Frequency of testing
 - (3) Data Reduction

Permittee shall comply with the data reduction requirements of 40 CFR Part 75.10(d)(1).
 - c. The Permittee shall comply with all applicable recordkeeping and reporting requirements of 40 CFR Part 75 Subparts F and G respectively.
 - d. The continuous opacity monitoring system shall meet the following requirements:
 - (1) 40 CFR 60, Appendix B, Performance Specification 1, "Specification and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources"
 - (a) Apparatus

- (b) Installation Specifications
- (c) Design and Performance Specifications
- (d) Design Specifications Verification Procedure
- (e) Performance Specifications Verification Procedure
- (f) Equations

(2) The following quality assurance requirements:

(a) Calibration Checks

The Permittee shall check the zero (or low-level value between 0 and 20% of span value) and span (50 to 100 % of span value) calibration drifts at least once daily in accordance with a written procedure.

[40 CFR 60.13(d)(1) and 40 CFR 60, Appendix B, PS1, 5.2]

(b) Zero and Span Drift Adjustments

i) The zero and span shall, as a minimum, be adjusted whenever the 24-hr zero drift or 24-hr span drift exceeds 4% opacity. [40 CFR 60.13(d)(1)]

ii) The system shall allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. [40 CFR 60.13(d)(1)]

iii) The optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. [40 CFR 60.13(d)(1)]

iv) For systems using automatic zero adjustments, the optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity. [40 CFR 60.13(d)(1)]

(c) System Checks

A method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam to provide a system check of the analyzer

internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly shall be used by the Permittee.

[40 CFR 60.13(d)(2)]

(d) Minimum Frequency of Operation

Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the continuous opacity monitoring system (COMS) shall be in continuous operation and shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period[40 CFR 60.13(e)(1)]

(e) Data Reduction and Missing Data [40 CFR 60.13(h)]

- i) The Permittee shall reduce all data from the COMS to 6-minute averages. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.
- ii) Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under the previous paragraph. An arithmetic or integrated average of all data may be used.

2. Monitoring for Particulate Emissions [A.A.C. R18-2-306.A.3.b]

- a. The Permittee shall evaluate opacity measurements from the COMS on a 24-hr rolling average excluding periods of startup, shutdown, and malfunction. If the 24-hour rolling average opacity exceeds 12 percent, the Permittee shall initiate a investigation of the control equipment within 24 hours for possible corrective action. If corrective action is required, the Permittee shall proceed to implement such corrective action as soon as practicable in order to minimize possible exceedances of the opacity or the particulate standard established in this permit.
- b. The Permittee shall log in ink or electronic format and maintain a record of 24-hour opacity measurements taken in accordance with paragraph (a) above and any investigative and corrective actions taken. A record of actions taken shall include recording the date and time of the event and the date and time corrective action if any is completed.

- c. A 24-hour opacity rolling average above 12 percent does not in itself constitute a violation of either the opacity or the particulate standard, nor is it implied that an opacity measurement and a particulate mass emission correlation exist or may be inferred.

3. Excess Emissions

- a. Excess emission and monitoring system performance (MSP) reports for Steam Units 1 and 2 shall be submitted to the Department and EPA Region IX for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in III.D.3.b. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
[40 CFR 60.45(g)]

(1) Opacity

Excess emissions for Units 1 and 2 are defined as any six-minute period during which the average opacity of emissions exceeds 15 percent opacity.
[40 CFR 60.45(g)(1)]

(2) Sulfur Dioxide

Excess emissions for Units 1 and 2 are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceeds the applicable standard in Section I.A.3 of this Attachment.
[40 CFR 60.45(g)(2)]

(3) Nitrogen Oxides.

Excess emissions for Units 1 and 2 using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards in Section I.A.4 of this Attachment.
[40 CFR 60.45(g)(3)]

- b. The summary quarterly report form submission required in paragraph III.D.3.a above shall be in the format specified in 40 CFR 60.7(d). The excess emissions report shall include the following information:
[40 CFR 60.7(c)]

- (1) The magnitude of excess emissions computed, any conversion factor(s)

used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - (3) The date and time identifying each period during which the CMS was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - (4) When no excess emissions have occurred or the CMS(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- c. In addition to 3.a and 3.b above, Permittee shall report emissions exceeding an emission limitation or standard as deviations in accordance with Section XII.B of Attachment "A" of this permit. [A.A.C. R18-2-306.A..5.b]
4. Coal shall be sampled before entering the boilers. This sample shall be analyzed for moisture, ash, sulfur content, and gross calorific value. Analysis of coal samples provided by the coal supplier may be utilized for this purpose. The results of these analyses shall be retained for at least five years following the date of measurements. All sampling, sample preparation and analyses performed or caused to be performed shall be performed to the current ASTM standard methods.

[EPA Approval to Construct of December 21, 1977, Condition XI]

E. Auxiliary Boiler

1. Visible Emissions [A.A.C. R18-2-306.A.3]

The Permittee shall monitor opacity according to the following schedule:

- a. When operating continuously for a time period greater than 48 hours but less than 168 hours, one opacity reading will be observed at the exit of the boiler's stack.
- b. When operating continuously for a time period greater than 168 hours, at least one opacity reading during each 168 hour period will be observed at the exit of the boiler's stack.

All opacity readings will be observed in accordance with EPA Reference Method 9. The Permittee shall log in ink or in an electronic format and maintain a record of the opacity readings from above and the number of hours fuel oil is burned continuously.

2. Particulate Matter [A.A.C. R18-2-306.A.4]

The Permittee shall keep on record, along with the fuel firing rate, the contractual agreement with the liquid fuel vendor containing the specifications of the liquid fuel being fired for the following parameters:

- a. The higher heating value
- b. The ash content

3. Sulfur Dioxide [A.A.C. R18-2-306.A.4]

a. The Permittee shall keep records of fuel supplier contractual agreement including the following information:

- (1) The name of the oil supplier;
- (2) The sulfur content and heating value of the oil from which the shipment came; and
- (3) The method used to determine the sulfur content of the oil.

b. The Permittee shall maintain records of all emissions calculations performed for any change in a.(2) above according to the following equation:

SO_2 (lb/MMBtu)

$$= \frac{2.0 \times [\text{Weight percent of sulfur}/100] \times [\text{Density (lb/gal)}]}{[\text{Heating value (Btu/gal)}] \times [1 \text{ MMBtu}/1,000,000 \text{ Btu}]}$$

4. The Permittee shall record the dates and hours of operation of the auxiliary boiler.

5. The Permittee shall submit the dates and hours of operation of the auxiliary boiler for the period of each compliance certification.

6. The Permittee shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent from the auxiliary boiler. [A.A.C. R18-2-724.J]

F. Coal Preparation Plant [A.A.C. R18-2-306.A.3.b]

Opacity

1. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the coal preparation plant when it is in operation. This weekly survey shall include observation of all exposed transfer points, enclosed transfer points, the coal storage pile, and the baghouses in the coal handling system. Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
2. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 20% opacity, the observer shall if possible take a six-minute Method 9 observation of the plume.
3. If the six-minute opacity of the plume exceeds 20%, the Permittee shall do the following:
 - (1) Adjust or repair the controls or equipment to reduce opacity to below 20%; and
 - (2) Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.
4. If the six-minute opacity of the plume is less than 20%, the observer shall make a record of the following:
 - a. Date and time of the test; and
 - b. The results of the Method 9 observation.

G. Lime Handling

1. Opacity [A.A.C. R18-2-306.A.3]
 - a. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the lime handling system when it is in operation. This weekly observation shall include observation of all exposed transfer points and each baghouse exhaust. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
 - b. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 40% opacity, the observer shall if possible take a six-minute Method 9 observation of the plume.
 - c. If the six-minute opacity of the plume exceeds 40%, the Permittee shall do the following:

- (1) Adjust or repair the controls or equipment to reduce opacity to below 40%; and
 - (2) Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.
- d. If the six-minute opacity of the plume is less than 40%, the observer shall make a record of the following:
 - (1) Date and time of the test; and
 - (2) The results of the Method 9 observation.
2. Particulate Matter
 - a. The Permittee shall maintain and operate the baghouses in accordance with Best Management Practices. These specifications shall be on file and shall be readily available for inspection by the Department.
 - b. The Permittee shall maintain records of emissions related maintenance performed on the baghouses. [A.A.C. R18-2-306.A.3.b]

H. Fly Ash Handling

Opacity [A.A.C. R18-2-306.A.3.b]

1. A certified Method 9 observer shall conduct a weekly visual survey of visible emissions from the flyash handling system when it is in operation. This weekly observation shall include observation of all exposed transfer points. The Permittee shall keep a record of the name of the observer, the date on which the observation was made, and the results of the observation.
2. If the observer sees a plume from an emission point that on an instantaneous basis appears to exceed 40% opacity, the observer shall if possible take a six-minute Method 9 observation of the plume.
3. If the six-minute opacity of the plume exceeds 40%, the Permittee shall do the following:
 - a. Adjust or repair the controls or equipment to reduce opacity to below 40%; and
 - b. Report it as an excess emission in accordance with Section XII.A of Attachment A of this permit.
4. If the six-minute opacity of the plume is less than 40%, the observer shall make a record of the following:

- a. Date and time of the test; and
- b. The results of the Method 9 observation.

I. Non-Point Sources

1. Open Areas, Roadways & Streets, Storage Piles, and Material Handling

The Permittee shall maintain records of dates and type of control measures adopted pursuant to Section I.G.1.b of this Attachment. [A.A.C. R18-2-306.A.4]

2. Open Burning

The recordkeeping requirements for I.G.2 of this Attachment may be complied with by maintaining copies of all open burn permits on file.

J. Other Periodic Activities

1. Abrasive Blasting

Each time an abrasive blasting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

[A.A.C. R18-2-306.A.4]

- a. The date the project conducted;
- b. The duration of the project; and
- c. Type of control measures employed.

2. Use of Paints

- a. Each time a spray painting project is conducted, the Permittee shall log in ink or in an electronic format, a record of the following:

[A.A.C. R18-2-306.A.4]

- (1) The date the project was conducted;
- (2) The duration of the project;
- (3) Type of control measures employed; and
- (4) Material Safety Data Sheets for all paints and solvents used in the project.

- b. Architectural coating and spot painting projects shall be exempt from the recordkeeping requirements of part a. above.

3. Mobile Sources

The Permittee shall keep a record of all emissions related maintenance activities performed on the Permittee's mobile sources defined as I.H.3 stationed at the facility as per manufacturer's specifications. [A.A.C. R18-2-306.A.4]

4. Demolition/Renovation

The Permittee shall keep all required records in a file. The required records include the "NESHAP Notification for Renovation and Demolition Activities" form and all supporting documents.

5. Nonvehicle Air Conditioner Maintenance and/or Services

The Permittee shall keep all records required by the applicable requirements of 40 CFR 82 - Subpart F in a file.

IV. TESTING REQUIREMENTS

- A. For the purpose of this permit, the EPA Reference Method 9 reading shall be defined as an average of 24 consecutive opacity observations recorded at 15-second intervals. A set is composed of any 24 consecutive observations. Sets need not be consecutive in time and in no case shall two sets overlap. For each set of 24 observations, calculate the average by summing the opacity of the 24 observations and dividing this sum by 24.

[40 CFR 60, Appendix A, Method 9, Section 2.5]

B. Unit 1 and Unit 2

1. Emission Rate

- a. The emission rate (E) of particulate matter, SO₂, or NO_x shall be calculated for each run using the following equations: [40 CFR 60.46(b)(1)]

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

%O₂ = oxygen concentration, percent dry basis.

F_d = factor as determined from Method 19.

- b. In addition to Section IV.B.1.a above, Permittee may follow the methodology specified in 40 CFR §60.46(d)(1) to determine the emission rate (E) of particulate matter, SO₂, or NO_x. [40 CFR 60.46(d)(1)]

2. Particulate Matter

Permittee shall perform an annual performance test to determine the particulate matter concentration using EPA Reference Method 5. [40 CFR 60.46(b)(2)]

3. Sulfur Dioxide

Permittee shall perform an annual performance test to determine the sulfur dioxide concentration using EPA Reference Method 6 or 6C. [40 CFR 60.46(b)(4)]

4. Nitrogen Oxides

Permittee shall perform an annual performance test to determine the nitrogen oxides concentration using EPA Reference Method 7 or 7E. [40 CFR 60.46(b)(5)]

5. Opacity

Permittee shall perform an annual performance test to determine opacity using EPA Reference Method 9. [40 CFR 60.46(b)(3)]

C. Coal Preparation

[40 CFR 60.254(b)(2)]

Within 180 days of issuance of this permit, the Permittee shall conduct a performance test to determine compliance with the opacity standard in Section I.C of this Attachment.

V. AMBIENT AIR MONITORING

A. The Permittee shall maintain and operate ambient monitoring equipment to verify compliance with the Ambient Air Quality Standards and the maximum allowable pollutant concentration increases.

[Approval to Construct of December 21, 1977, Condition XII]

B. The Permittee shall monitor and operate ambient monitoring equipment to collect PM₁₀, NO_x, SO₂, wind speed, and wind direction data at the following locations:

Type of Monitor

Location

PM₁₀, NO_x, SO₂,
Wind Speed and Wind Direction

Coyote Hills, AZ

PM₁₀
Wind Speed and Wind Direction

Plant Site #4

Monitoring, quality assurance, quality control and data analysis for PM₁₀, NO_x, SO₂, wind speed, and wind direction data shall be conducted in accordance with the following guidelines and regulations:

- a. National Primary and Secondary Ambient Air Quality Standards, 40 CFR, Part 50 (including appendices);
- b. Ambient Air Quality Surveillance, 40 CFR, Part 58, Appendices A and E;
- c. Quality Assurance Handbook for Air Pollution Measurement System, Volumes II and IV, U.S. Environmental Protection Agency; and
- d. ON-Site Meteorological Program Guidance for Regulatory Modeling Applications, EPA450/4-87-013, June 1987.

[A.A.C. R18-2-306.A.2]

C. The PM₁₀, NO_x, SO₂ and wind speed/direction monitors shall be operated according to the Best Management Practices.

D. The Permittee shall maintain a file of all PM₁₀, NO_x, SO₂, wind speed, and wind direction measurements; quarterly reports; calibration records; and quality control/quality assurance activities for the PM₁₀, NO_x, SO₂, and wind speed/direction monitors for a minimum of five years from the date of collection of such information or generation of reports.

[A.A.C. R18-2-306.A.4]

E. The Permittee shall submit a quarterly report to summarize all PM₁₀, NO_x, and SO₂ ambient monitoring data of each month.

[A.A.C. R18-2-306.A.5.a]

VI. USED OIL

A. Specifications

[A.R.S. § 49-426.G.1]

The Permittee shall only burn on-specification used oil or on-site generated on-specification used oil fuel (on-spec used oil) along with coal in the Unit 1, if the following conditions are met:

1. The flash point of the on-spec used oil does not fall below 100 degrees Fahrenheit.
2. The Permittee shall comply with all applicable requirements of A.R.S. §49-801 through §49-815 - Management of Used Oil.
3. The on-spec used oil shall not contain contaminants in excess of the following levels:

Arsenic	5 ppm
Cadmium	2 ppm
Chromium	10 ppm
Lead	100 ppm
PCBs	2 ppm

4. The maximum amount of used oil consumed shall not exceed 2,500 gallons per hour and 100,000 gallons per year, based on a 12-month rolling total. [A.R.S. §49-426.G.1]

B. Recordkeeping and Reporting Requirements [A.R.S. § 49-426.G.4]

1. All tests conducted pursuant to Section VI.C of this Attachment shall be documented and a report submitted to the Department along with the compliance certification.
2. The Permittee shall maintain such records as required to document the use of the above fuel including the following:
 - a. Dates on which used oil was burned;
 - b. Hours of used oil was burned; and
 - c. The quantity of used oil burned.

C. Testing [A.R.S. § 49-426.G.2]

A representative sample of used oil shall be tested for arsenic, cadmium, chromium, and lead using approved EPA methods prior to burning.

ATTACHMENT "C": APPLICABLE REQUIREMENTS

Air Quality Control Permit No. 1000105

For

TUCSON ELECTRIC POWER COMPANY - Springerville Generating Station

REQUIREMENTS SPECIFICALLY IDENTIFIED AS APPLICABLE

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2

ARTICLE 6 **EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES**

R18-2-601	General
R18-2-602	Unlawful Open Burning
R18-2-604	Open Areas, Dry Washes, or Riverbeds
R18-2-605	Roadways and Streets
R18-2-606	Material Handling
R18-2-607	Storage Piles
R18-2-610	Evaluation of Nonpoint Source Emissions

ARTICLE 7 **EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS**

R18-2-702.B	General Provisions
R18-2-724.A	Standards of Performance for Existing Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.C.1	Standards of Performance for Existing Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.E	Standards of Performance for Existing Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-724.J	Standards of Performance for Existing Fossil-fuel Fired Industrial and Commercial Equipment
R18-2-726	Standards of Performance for Sandblasting Operations
R18-2-727	Standards of Performance for Spray Painting Operations
SIP R9-2-527.C	Standards of Performance for Spray Painting Operations
R18-2-730.A	Standards of Performance for Unclassified Sources
R18-2-730.D	Standards of Performance for Unclassified Sources
R18-2-730.F	Standards of Performance for Unclassified Sources
R18-2-730.G	Standards of Performance for Unclassified Sources

ARTICLE 8**EMISSIONS FROM MOBILE SOURCES (NEW AND EXISTING)**

R18-2-801	Classification of Mobile Sources
R18-2-802	Off-road Machinery
R18-2-804	Roadway and Site Cleaning Machinery

ARTICLE 9**NEW SOURCE PERFORMANCE STANDARDS**

R18-2-901.1	40 CFR 60, Subpart A, General Provisions
R18-2-901.2	40 CFR 60, Subpart D, Electric Utility Steam Generating Units for which Construction is Commenced After August 17, 1971
R18-2-903.1	Standards of Performance for Fossil-fuel Fired Steam Generators
R18-2-903.2	Standards of Performance for Fossil-fuel Fired Steam Generators
R18-2-901.31	40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants

ARTICLE 11**FEDERAL HAZARDOUS AIR POLLUTANTS**

R18-2-1101	National Emissions Standards for Hazardous Air Pollutants (NESHAPS)
A.8	Subpart M - Asbestos. See Federally enforceable applicable requirements, NESHAPS section, 40 CFR Part 61.

ARIZONA REVISED STATUTES(A.R.S.), CHAPTER 3, ARTICLE 2

A.R.S. 49-426.G	Permits; duties of director; exceptions; applications; objections; fees (State Requirement)
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ACCIDENTAL RELEASE PREVENTION PROGRAM

40 CFR 68	Chemical Accident Prevention Provisions
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STRATOSPHERIC OZONE PROTECTION

40 CFR 82	Subpart F - Recycling and Reducing Emissions.
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APPROVAL TO CONSTRUCT, December 21, 1977

The Approval to Construct of December 21, 1977 was issued by EPA to the facility for installation of two coal-fired steam electric generating units.

REQUIREMENTS SPECIFICALLY IDENTIFIED AS NOT APPLICABLE

As requested by the Permittee, specific non-applicable requirements have been identified as follows. A permit shield is granted from these requirements.

A.A.C. R18-2-710 (Standards of Performance for Existing Storage Vessels for Petroleum Liquids)

This regulation is not applicable to two Springerville Generating Station petroleum storage tanks because they have only been used to store fuel oils. These standards apply to, among other facilities, storage tanks containing petroleum liquids. Fuel oil is excluded from the definition of petroleum liquids under A.A.C. R18-2-701(21).

A.A.C. R18-2-724 (I) (Requirement to install and operate a continuous opacity monitoring system monitoring system for the boiler)

This provision requires each owner and operator to install the monitoring system to measure the opacity of emissions discharged from the control device. TEP's auxiliary boiler, which is used approximately on day per year, is not equipped with a control device.

ATTACHMENT "D": EQUIPMENT LIST

Air Quality Control Permit No. 1000105

For

TUCSON ELECTRIC POWER PLANT - Springerville Generating Station

Process Equipment

Equipment	Description	Size	Serial Number	Model	Date of Commercial Operation/ Manufacture
Unit 1 Boiler	Tangentially fired, single-drum, reheat, controlled circulation sub critical steam generating unit	380 MW	SGS-8-1-004	Combustion Engineering Inc.	01/30/78 (Commenced construction) 5/1/85 (Commercial operating)
Unit 2 Boiler	Tangentially fired, single-drum, reheat, controlled circulation sub critical steam generating unit	380 MW	SGS-8-1-004	Combustion Engineering Inc.	01/30/78 (Commenced construction) 6/1/90 (Commercial operating)
Auxiliary Boiler	Oil fired with superheater for two unit cold start-up	113 MMBtu/hr	AS-5-2-001	Zurn Industries	01/30/78 (Commenced construction) 1984 (Commercial operating)
Cooling Tower 1	Steam unit cooling tower	Recirculation rate - 159,800 gal/min	PGS-9-1	--	--
Cooling Tower 2	Steam unit cooling tower	Recirculation rate - 159,800 gal/min	PGS-9-1	--	--
Coal Preparation Plant	Storage bin, unloading system, sampling system, crusher, conveyor transfer points, and reclaim	5,272,200 ton/yr	SGS-5-1	--	--

Equipment	Description	Size	Serial Number	Model	Date of Commercial Operation/ Manufacture
Lime Handling	Storage silos, lime unloading and lime feed bins	76,734 ton/yr	AS-6-1-001, AS-6-2-001, AS-6-3-001	--	--
Nonpoint Sources	--	--	--	--	--
Sand Blasting	--	--	--	--	--
Spray Painting	--	--	--	--	--
Mobile Sources	--	--	--	--	--
Demolition and Renovation	--	--	--	--	--
Air Conditioner Maintenance and Service	--	--	--	--	--

Continuous Emission Monitors

Steam Unit	NOx Monitor	SO ₂ Monitor	CO ₂ Monitor	Opacity Monitor	Flow Monitor
Unit 1	Monitor Labs: - model SM 8175 dual component, split range SO ₂ /NO _x process gas monitor - model LS 710 instument controller - both primary and backup	Monitor Labs: - model SM 8175 dual component, split range SO ₂ /NO _x process gas monitor - model LS 710 instument controller - both primary and backup	- Monitor Labs EX4700 - Model LS 710 instument controller	Lear Siegler Inc. - RM 4200 primary communication link - Signal feed selector switch - LS541 backup	United Sciences Model 100 flow & temperature measurement system both primary and backup

Steam Unit	NOx Monitor	SO ₂ Monitor	CO ₂ Monitor	Opacity Monitor	Flow Monitor
Unit 2	Monitor Labs: - model SM 8175 dual component, split range SO ₂ /NO _x process gas monitor - model LS 710 instument controller - both primary and backup	Monitor Labs: - model SM 8175 dual component, split range SO ₂ /NO _x process gas monitor - model LS 710 instument controller - both primary and backup	- Monitor Labs EX4700 - Model LS 710 instument controller	Lear Siegler Inc. - RM 4200 primary communication link - Signal feed selector switch - LS541 backup	United Sciences Model 100 flow & temperature measurement system both primary and backup

Air Pollution Control Equipment:

Equipment	Description	Size	Serial Number	Model/ Manufacturer	Date of Construction/ Commencement
Sulfur Dioxide Removal System	Dry flue gas desulfurization for Steam Unit 1	150 GPM each rotary atomizer (3), 11,500 RPM, 800 HP drive motor with a 2 HP oil pump motor per unit	--	Niro	01/30/78 (Commenced construction)
Sulfur Dioxide Removal System	Dry flue gas desulfurization for Steam Unit 2	150 GPM each rotary atomizer (3), 11,500 RPM, 800 HP drive motor with a 2 HP oil pump motor per unit	--	Niro	01/30/78 (Commenced construction)
Particulate Matter Removal System on Unit 1	Baghouses	1,320,000 acfm at 160 °F (2)	--	Joy	01/30/78 (Commenced construction)
Particulate Matter Removal System on Unit 2	Baghouses	1,320,000 acfm at 160 °F (2)	--	Joy	01/30/78 (Commenced construction)
Coal Handling System	Unloading Transfer Tower Collector	12,000 cfm at 70 °F	09285A	Johnson-March Model #PCT 12-10	01/30/78 (Commenced construction)
	Secondary Crusher Enclosure Dust Collector (DC-2)	27,950 cfm at 70 °F	002858	Johnson-March Model #PCT 13-17	

Equipment	Description	Size	Serial Number	Model/ Manufacturer	Date of Construction/ Commencement
	Sampler Enclosure Dust Collector	9,400 cfm at 70 °F	09285C	Johnson-March Model #PCT 10-10	
	Silo Feed Tower Collector (DC-4)	27,950 cfm at 70 °F	09285D	Johnson-March Model #PCT 10-13-17	
	Silo Feed Tower Collector (DC-4A)	27,950 cfm at 70 °F	09285B	Johnson-March Model #PCT 10-13-17	
Lime Handling System	Lime Silos Collector	--	345-78-4-3005-00	Fuller Co.	01/30/78 (Commenced construction)
	Baghouses at Water Treatment Silos (4)	--	3710(1) 3710(2) 3710(3) 3710(4)	EVO Corp. Model #84WBO48C	

ATTACHMENT "E": INSIGNIFICANT ACTIVITIES

Air Quality Control Permit No. 1000105

For

TUCSON ELECTRIC POWER PLANT - Springerville Generating Station

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
1	Unit 1 and Unit 2 condensate system vents, drains and reliefs
2	Unit 1 and Unit 2 condensate pump vent pump A
3	Unit 1 and Unit 2 condensate pump vent pump B
4	Unit 1 and Unit 2 condensate pump vent pump C
5	Unit 1 and Unit 2 gland steam condenser vent
6	Unit 1 and Unit 2 air ejector condenser vent
7	Unit 1 and Unit 2 feedwater system vents, drains and reliefs
8	Unit 1 and Unit 2 feedwater heater 7 vent
9	Unit 1 and Unit 2 feedwater heater 6 vent
10	Unit 1 and Unit 2 feedwater heater 5 vent
11	Unit 1 and Unit 2 deaerating heater vent
12	Unit 1 and Unit 2 boiler feed pump A vent
13	Unit 1 and Unit 2 boiler feed pump A seal leakoff vent
14	Unit 1 and Unit2 boiler feed pump B vent
15	Unit 1 and Unit 2 boiler feed pump B seal leakoff vent
16	Unit 1 and Unit 2 feedwater heater 3 vent
17	Unit 1 and Unit 2 feedwater heater 2 vent
18	Unit 1 and Unit 2 feedwater heater 1 vent
19	Unit 1 and Unit 2 boiler steam drum vents
20	Unit 1 and Unit 2 blowdown tank vent
21	Unit 1 and Unit 2 boiler emergency relief

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
22	Unit 1 and Unit2 main transformer
23	Unit 1 and Unit 2 main auxiliary transformer (2)
24	Unit 1 and Unit 2 excitation transformer
25	Unit 1 and Unit 2 generator grounding transformer
26	Unit 1 and Unit 2 hydrogen system vents
27	Unit 1 and Unit 2 stator cooling water vents
28	Unit 1 and Unit 2 circulating water system vents, drains and reliefs
29	Unit 1 and Unit 2 condenser vents
30	Unit 1 and Unit 2 condenser air removal vents
31	Unit 1 and Unit 2 auxiliary steam system vents, drains and reliefs
32	Unit 1 and Unit 2 SDA lime system water vents, drains and reliefs
33	Unit 1 and Unit 2 condensate tank vent
34	Unit 1 and Unit 2 cooling water storage tank vent
35	Unit 1 and Unit 2 cooling water system vent, drain and relief
36	Unit 1 and Unit 2 water/steam sampling system vent, drain and relief
37	Unit 1 and Unit 2 polish system vents, drain and reliefs
38	Unit 1 and Unit 2 polisher acid day tank vent
39	Unit 1 and Unit 2 polisher caustic day tank vent
40	Unit 1 and Unit 2 polisher vessel A vent
41	Unit 1 and Unit 2 polisher vessel B vent
42	Unit 1 and Unit 2 polisher vessel C vent
43	Unit 1 and Unit 2 chemical feed system vents, drains and reliefs
44	Unit 1 and Unit 2 ammonia tank vent
45	Unit 1 and Unit 2 hydrazine tank vent
46	Unit 1 and Unit 2 phosphate dissolving Hooper

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
47	Unit 1 and Unit 2 phosphate day tank
48	Unit 1 and Unit 2 continuous emissions monitors
49	Bottom ash dewatering bin A
50	Bottom ash dewatering bin B
51	Bottom ash settling tank
52	Bottom ash surge tank
53	Lube oil system vents, drains and reliefs
54	Clean lube oil storage tank vent
55	Emergency diesel generator
56	Auxiliary boiler system vents, drains and reliefs
57	Auxiliary boiler deaerator vent
58	Auxiliary boiler condensate system emergency relief vents
59	Auxiliary boiler feedwater system emergency relief vents
60	Auxiliary boiler steam drum emergency relief vents
61	Auxiliary boiler chemical feed water system vents, drains and reliefs
62	Auxiliary boiler chemical feed water system ammonia tank vent
63	Auxiliary boiler chemical feed water system hydrazine tank vent
64	Auxiliary boiler chemical feed water system phosphate dissolving hopper
65	Auxiliary boiler chemical feed water system phosphate day tank
66	Raw water system vents, drains, and reliefs
67	Service water system vents, drains and reliefs
68	Water treatment system vents, drains and reliefs
69	Water treatment lime suction tanks
70	Water treatment influent tank1
71	Water treatment influent tank 2

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
72	Water treatment reactivator 1
73	Water treatment reactivator 2
74	Reactivator 1 effluent tank
75	Reactivator 2 effluent tank
76	Reactivator sludge thickner tank
77	Reactivator sludge thickner supernatant tank
78	Soda ash solution tanks
79	Coagulant aid drum
80	Coagulant aid solution tank
81	Backwash storage tank
82	ROSEP acid day tank
83	Filtered water cartridge filter
84	Vacuum Degasifier Vent
85	Reverse Osmosis Treated Water Tank Vent
86	ROSEP Chemical Cleaning Batch Tank
87	Demineralizer Cation Vessel (2) Vent
88	Demineralizer Anion Vessel (2) Vent
89	Demineralizer Mixed Bed Vessel (2) Vent
90	Demineralizer Acid Day Tank
91	Demineralizer Caustic Day Tank
92	Demineralizer Hot Water Tank
93	Common Condensate Tank Vent
94	Potable Water System Hypochlorite Tank
95	Potable Water Head Tank Vent
96	Potable Water System Vents, Drains and Reliefs

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
97	Polishing Demineralizer Acid Storage Tank Vent
98	Polishing Demineralizer Caustic Storage Tank Vent
99	Bulk Ammonia Storage Tank
100	Water Treatment Acid Storage Tank B Vent
101	Water Treatment Acid Storage Tank C Vent
102	Water Treatment Caustic Storage Tank A Vent
103	Water Treatment Caustic Storage Tank B Vent
104	Cooling Tower Acid Tank Vent
105	Cooling Tower Dispersant Tank Vent
106	Power Building HVAC System Vents, Drains and Reliefs
107	Service Air System Vents, Drains and Reliefs
108	Instrument Air System Vents, Drains and Reliefs
109	Yard Loop Header System Vents, Drains and Reliefs
110	Diesel Fire Pump
111	Nitrogen System (Unit 1 and 2) Vents, Drains and Reliefs
112	Hydrogen System (Unit 1 and 2) Vents, Drains and Reliefs
113	Polisher Resin Separation & Cation Regeneration Vessel Vent
114	Polisher Anion Regeneration Vessel Vent
115	Polisher Mixing and Storage Vessel Vent
116	Neutralizing System Vents, Drains and Reliefs
117	Neutralizing Tank A
118	Neutralizing Tank B
119	Oily Waste System Vents, Drains and Reliefs
120	Oil Waste Surge Tank VentOil/Water Separator Vent
121	Oil Separator Discharge TankWaste Water Storage Tank

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
122	Sewer System Vents, Drains and Reliefs
123	Building Latrine Vents
124	Sewage Treatment Facility
125	Raw Water Storage Reservoir A
126	Raw Water Storage Reservoir B
127	Makeup Water Reservoir A
128	Makeup Water Reservoir B
129	Recoverable Pond A
130	Recoverable Pond B
131	Cooling Tower Blowdown Pond A
132	Cooling Tower Blowdown Pond B
133	Process Waste Water Pond
134	Sludge Pond A
135	Sludge Pond B
136	Sludge Pond C
137	Sludge Pond D
138	Storm Water Run Off Pond #1
139	Storm Water Run Off Pond #2
140	Storm Water Run Off Pond #3
141	Coal Pile Run Off Pond
143	Sewage Treatment Pond A
144	Sewage Treatment Pond B
145	Evaporation Pond #1
146	Evaporation Pond #2
147	Evaporation Pond #3

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
148	Evaporation Pond #4
149	Evaporation Pond #5
150	Evaporation Pond #6
151	Water Treatment Laboratory Activities
152	Coal Laboratory Activities
153	Environmental Laboratory Activities
154	General Station Maintenance Activities and Associated Equipment
155	Natural Gas, Propane, Butane, Liquefied Petroleum Gas, Acetylene Storage Tanks and Torches
156	Diesel Storage Tank
157	Diesel Unloading, Pumping and Transfer SystemTransportation Diesel Storage Tanks
158	10,000 Gallon Gasoline Storage Tanks
159	Waste Oil Drum Storage Area
160	Waste Oil Storage Tank
161	Waste Storage Area
162	Building Housekeeping Activities
163	Site Housekeeping Activities Including Vacuum Truck and Spill Cleanup
166	Landscaping and Site Housekeeping Activities
167	Use of Pesticides, Fumigants and Herbicides
168	Groundskeeping Activities
169	Industrial Vacuum Cleaners
170	Use of Consumer Products (Product us at site in same manner as normal consumer use)
172	All Paved and Unpaved Roads Except Ash Haul Roads Located Outside Site Boundaries
176	Automobile, Station Wagon, Pickup Truck or Van Use at Site
180	Medical Activities (Activities directly used in the diagnosis and treatment of disease, injury or other medical condition).

Insig. No.	POTENTIAL EMISSION POINTS CLASSIFIED AS "INSIGNIFICANT ACTIVITIES" PURSUANT TO A.A.C. R18-2-101.54
181	Manually Operated Equipment (Equipment used for buffing, polishing, carving, cutting, drilling, machining, routing, sanding, sawing, surface grinding or turning and associated venting hoods)
182	Individual Equipment Joints and Attachments (All flanges, piping and piping attachments, valves, pump seals, pressure relief valves, safety valves that connect or hold together piping systems or protect systems from over pressurization)
183	Battery Banks and Recharging Area
184	Plastic Pipe Welding
186	Steam Cleaning (Equipment used exclusively for portable steam cleaning)
188	Pump/Motor Lubricating Oil Reservoirs, Hydraulic Oil Reservoirs, Turbine Lubricating Oil Reservoirs
189	Adhesive Usage Not Related to Production
190	Caulking Operation that are not part of production
191	Electric Motors
192	High Voltage Induced Corona
193	Safety devices (Fire extinguishers, fire suppressions systems, deluge systems)
194	Filter Draining
195	Soil gas Sampling
196	General Vehicle Maintenance
197	Carbon Dioxide System (Unit 1 and 2) Vents, Drains and Reliefs
198	Carbon dioxide system (Unit 1 & 2) vents, drains and reliefs
199	Aerosol Can Use
200	Cathodic Protection Systems
201	Cafeteria Activities
202	Circuit Breakers
203	Water Treatment Acid Storage Tank A Vent

ATTACHMENT "F":PHASE II ACID RAIN PROVISIONS

Air Quality Control Permit No. 1000105

For

TUCSON ELECTRIC POWER PLANT - Springerville Generating Station

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with Arizona Revised Statutes, Title 49, Chapter 3, Article 2, Section 426.N, and Titles IV and V of the Clean Air Act, the Arizona Department of Environmental Quality issues this Phase II Acid Rain Permit pursuant to Arizona Administrative Code Title 18, Chapter 2, Article 3, Section 333 (A.A.C. R18-2-333), "Acid Rain".

2. SO₂ Allowance Allocations and NO_x Requirements for each affected unit

		1998	1999	2000	2001	2002	2003	2004
Unit 1	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73	NA	NA	6515*	6515*	6515*	6515*	6515*
	NO _x limit	Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NO _x early election compliance plan for Unit 1. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NO _x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1) of 0.45 lb/MMBtu for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu until calendar year 2008.						

		1998	1999	2000	2001	2002	2003	2004
Unit 2	SO ₂ allowances under Tables 2, 3, or 4 of 40 CFR part 73	NA	NA	5708*	5708*	5708*	5708*	5708*
	NO _x limit	Pursuant to 40 CFR 76.8(d)(2), Arizona Department of Environmental Quality approves a NO _x early election compliance plan for Unit 2. The compliance plan is effective for calendar year 2000 through calendar year 2007. Under the compliance plan, the unit's annual average NO _x emission rate for each year, determined in accordance with 40 CFR Part 75, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(1) of 0.45 lb/MMBtu for tangentially fired boilers. If the unit is in compliance with its applicable emission limitation for each year of the plan, then the unit shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(1), of 0.40 lb/MMBtu until calendar year 2008.						

* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a 1998 revision to 40 CFR part 73 Tables 2, 3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

3. Comments, Notes and Justifications

Tucson Electric has early-elected for NO_x requirements on Units 1 and 2. Plans to construct Unit 3 have been postponed indefinitely

4. Permit Application

The Permittee, and any other owners or operators of the units at this facility, shall comply with the requirements contained in the attached acid rain permit application (OMB No. 2060-0258) signed by the Designated Representative Cosimo De Masi on August 14, 1997.